RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number:	10/567.537
Source:	1FWP
Date Processed by STIC:	4/10/07
•	

ENTERED



IFWP

RAW SEQUENCE LISTINGPATENT APPLICATION: **US/10/567,537**DATE: 04/10/2007

TIME: 12:02:03

```
3 <110> APPLICANT: TSAI, LI-HUEI
             KOSIK, KENNETH S.
      4 .
      6 <120> TITLE OF INVENTION: sirnA BASED METHODS FOR TREATING ALZHEIMER'S DISEASE
      8 <130> FILE REFERENCE: HMV-090.01
     10 <140> CURRENT APPLICATION NUMBER: 10/567,537
C--> 11 <141> CURRENT FILING DATE: 2006-02-07
     13 <150> PRIOR APPLICATION NUMBER: PCT/US04/25633
     14 <151> PRIOR FILING DATE: 2004-08-09
     16 <150> PRIOR APPLICATION NUMBER: 60/493,614
     17 <151> PRIOR FILING DATE: 2003-08-08
     19 <160> NUMBER OF SEQ ID NOS: 20
     21 <170> SOFTWARE: PatentIn Ver. 3.2
     23 <210> SEQ ID NO: 1
     24 <211> LENGTH: 1506
     25 <212> TYPE: DNA
     26 <213 > ORGANISM: Homo sapiens
     28 <220> FEATURE:
     29 <221> NAME/KEY: CDS
     30 <222> LOCATION: (1)..(1506)
     32 <400> SEQUENCE: 1
     33 atg gcc caa gcc ctg ccc tgg ctc ctg ctg tgg atg ggc gcg gga gtg
     34 Met Ala Gln Ala Leu Pro Trp Leu Leu Leu Trp Met Gly Ala Gly Val
     37 ctg cct gcc cac ggc acc cag cac ggc atc cgg ctg ccc ctg cgc agc
     38 Leu Pro Ala His Gly Thr Gln His Gly Ile Arg Leu Pro Leu Arg Ser
    39
     41 ggc ctg ggg ggc gcc ccc ctg ggg ctg cgg ctg ccc cgg gag acc gac
                                                                           144
     42 Gly Leu Gly Gly Ala Pro Leu Gly Leu Arg Leu Pro Arg Glu Thr Asp
                                     40
     45 gaa gag ccc gag gag ccc ggc cgg agg ggc agc ttt gtg gag atg gtg
                                                                           192
     46 Glu Glu Pro Glu Glu Pro Gly Arg Arg Gly Ser Phe Val Glu Met Val
    49 gac aac ctg agg ggc aag tcg ggg cag ggc tac tac gtg gag atg acc
                                                                           240
    50 Asp Asn Leu Arg Gly Lys Ser Gly Gln Gly Tyr Tyr Val Glu Met Thr
                             70
    53 gtg ggc agc ccc ccg cag acg ctc aac atc ctg gtg gat aca ggc agc
    54 Val Gly Ser Pro Pro Gln Thr Leu Asn Ile Leu Val Asp Thr Gly Ser
    57 agt aac ttt gca gtg ggt gct gcc ccc cac ccc ttc ctg cat cgc tac
                                                                           336
    58 Ser Asn Phe Ala Val Gly Ala Ala Pro His Pro Phe Leu His Arg Tyr
                    100
    61 tac cag agg cag ctg tcc agc aca tac cgg gac ctc cgg aag ggt gtg
    62 Tyr Gln Arg Gln Leu Ser Ser Thr Tyr Arg Asp Leu Arg Lys Gly Val
```

RAW SEQUENCE LISTING DATE: 04/10/2007
PATENT APPLICATION: US/10/567,537 TIME: 12:02:03

63			115					120					125				
				tac													432
66	Tyr	Val	Pro	Tyr	Thr	Gln	Gly	Lys	Trp	Glu	Gly	Glu	Leu	Gly	Thr	Asp	
67		130					135					140					
69	ctg	gta	agc	atc	CCC	cat	ggc	CCC	aac	gtc	act	gtg	cgt	gcc	aac	att	480
70	Leu	Val	Ser	Ile	Pro	His	Gly	Pro	Asn	Val	Thr	Val	Arg	Ala	Asn	Ile	
71	145					150					155					160	
73	gct	gcc	atc	act	gaa	tca	gac	aag	ttc	ttc	atc	aac	ggc	tcc	aac	tgg	528
74	Ala	Ala	Ile	Thr	Glu	Ser	Asp	Lys	Phe	Phe	Ile	Asn	Gly	Ser	Asn	Trp	
75					165					170					175		
77	gaa	ggc	atc	ctg	ggg	ctg	gcc	tat	gct	gag	att	gcc	agg	cct	gac	gac	576
78	Glu	Gly	Ile	Leu	Gly	Leu	Ala	Tyr	Āla	Glu	Ile	Āla	Arg	Pro	Asp	Asp	
79				180	_			_	185				_	190	-		
81	tcc	ctg	gag	cct	ttc	ttt	gac	tct	ctg	gta	aag	cag	acc	cac	gtt	ccc	624
82	Ser	Leu	Glu	Pro	Phe	Phe	Asp	Ser	Leu	Val	Lys	Gln	Thr	His	Val	Pro	
83			195					200					205				
85	aac	ctc	ttc	tcc	ctg	cag	ctt	tgt	ggt	gct	ggc	ttc	ccc	ctc	aac	cag	672
				Ser													
87		210			i		215	-	-		•	220					
89	tct	gaa	gtg	ctg	gcc	tct	gtc	gga	ggg	agc	atg	atc	att	gga	ggt	atc	720
				Leu													
	225					230		_	_		235			- ,	-	240	
93	qac	cac	tcq	ctg	tac	aca	qqc	aqt	ctc	taa	tat	aca	ccc	atc	cqq	caa	768
				Leu													
95	-				245		•			250	-				255		
97	qaq	tgg	tat	tat	qaq	qtq	atc	att	qtq	cqq	qtq	qaq	atc	aat	qqa	caq	816
				Tyr													•
99		-	-	260					265	_				270	-		
101	gat	cto	g aaa	a atg	gac	: tgc	aac	gag	tac	aac	: tat	gac	aac	gago	ati	gtg	864
																e Val	
103	_		275		-	•	-	280	_		-	-	285				
105	gac	agt	gge	c acc	acc	aac	ctt	cgt	ttg	ccc	aag	aaa	gto	, ttt	ga:	a gct	912
																ı Āla	
107		290					295	-				300					
109	gca	gto	aaa	a tcc	ato	aag	gca	gcc	tac	tco	acg	gag	aag	g tto	c act	gat	960
																o Asp	
111	305	;	_			310)				315	5	_			320	
113	ggt	tto	t tg	g cta	gga	gag	cag	cto	gto	tgo	tgo	caa	gca	a ggo	aco	cacc	1008
																r Thr	
115	_				325					330	_			_	33!		
117	7 cct	tq	aad	att	ttc	cca	qto	ato	: tca	cto	tac	: cta	ato	ı qqt	: qa	g gtt	1056
																ı Val	
119		_	•	340					345		-			350			
		aac	cac	tco	tto	cqc	ato	acc	ato	ctt	ccc	cac	caa	a tac	cto	g cgg	1104
																ı Arg	
123			355			_		360					365	-		_	
		gto	gaa	a gat	gta	gcc	aco	tcc	caa	gac	gac	tgt:	tac	aac	, ttt	gcc	1152
																e Ala	
127		370		•			375			-	•	380	_	•			

RAW SEQUENCE LISTING DATE: 04/10/2007 PATENT APPLICATION: US/10/567,537 TIME: 12:02:03

130		tca Ser															1200
		ttc Phe		_	_		_		_	-		-					1248
		agc Ser															1296
		cct Pro															1344
	_	aca Thr 450	-					-			-		_		-		1392
150		tgc Cys	-			_	_			_		_	_				1440
		tgc Cys															1488
157		tcc Ser	_	_	aag	tga											1506
162	<210	0> SI	EQ II	ON C	: 2												
	<213	1> L	ENGT	H: 50	01												
163 164	<212	2> T	YPE:	PRT			•										
163 164 165	<212 <213	2> TY 3> OF	YPE:	PRT [SM:	Homo	sa <u>r</u>	oiens	5									
163 164 165 167	<212 <213 <400	2> TY 3> OF 0> SE	YPE: RGANI EQUEI	PRT ISM: NCE:	Homo	_			Lou	T OU	Trn	Mot	Clv	λĵο	Cly	Val	
163 164 165 167 168	<213 <213 <400 Met	2> TY 3> OF	YPE: RGANI EQUEI	PRT ISM: NCE:	Homo	_			Leu		Trp	Met	Gly	Ala	_	Val	
163 164 165 167 168 169	<213 <213 <400 Met	2> TY 3> OF 0> SF Ala	YPE: RGANI EQUEI Gln	PRT ISM: NCE: Ala	Homo 2 Leu 5	Pro	Trp	Leu		10	_		_		15		
163 164 165 167 168 169	<213 <213 <400 Met	2> TY 3> OF 0> SE	YPE: RGANI EQUEI Gln	PRT ISM: NCE: Ala	Homo 2 Leu 5	Pro	Trp	Leu		10	_		_		15		
163 164 165 167 168 169 171 172 174	<212 <213 <400 Met 1 Leu	2> TY 3> OF 0> SF Ala Pro	YPE: RGANI EQUEN Gln Ala Gly 35	PRT ISM: NCE: Ala His 20 Gly	Homo 2 Leu 5 Gly	Pro Thr Pro	Trp Gln Leu	Leu His Gly 40	Gly 25 Leu	10 Ile Arg	Arg Leu	Leu Pro	Pro Arg 45	Leu 30 Glu	15 Arg Thr	Ser Asp	
163 164 165 167 168 169 171 172 174 175	<212 <213 <400 Met 1 Leu	2> TY 3> OF 0> SF Ala Pro Leu Glu	YPE: RGANI EQUEN Gln Ala Gly 35	PRT ISM: NCE: Ala His 20 Gly	Homo 2 Leu 5 Gly	Pro Thr Pro	Trp Gln Leu Gly	Leu His Gly 40	Gly 25 Leu	10 Ile Arg	Arg Leu	Leu Pro Phe	Pro Arg 45	Leu 30 Glu	15 Arg Thr	Ser Asp	
163 164 165 167 168 169 171 172 174 175 177	<212 <213 <400 Met 1 Leu Gly	2> TY 3> OF 0> SF Ala Pro Leu Glu 50	YPE: RGANI EQUEN Gln Ala Gly 35 Pro	PRT ISM: NCE: Ala His 20 Gly	Homo 2 Leu 5 Gly Ala	Pro Thr Pro	Trp Gln Leu Gly 55	Leu His Gly 40 Arg	Gly 25 Leu Arg	10 Ile Arg Gly	Arg Leu Ser	Leu Pro Phe 60	Pro Arg 45 Val	Leu 30 Glu Glu	15 Arg Thr Met	Ser Asp Val	
163 164 165 167 168 169 171 172 174 175 177 178	<212 <213 <400 Met 1 Leu Gly Glu Asp	2> TY 3> OF 0> SF Ala Pro Leu Glu	YPE: RGANI EQUEN Gln Ala Gly 35 Pro	PRT ISM: NCE: Ala His 20 Gly	Homo 2 Leu 5 Gly Ala	Pro Thr Pro Pro	Trp Gln Leu Gly 55	Leu His Gly 40 Arg	Gly 25 Leu Arg	10 Ile Arg Gly	Arg Leu Ser Tyr	Leu Pro Phe 60	Pro Arg 45 Val	Leu 30 Glu Glu	15 Arg Thr Met	Ser Asp Val Thr	
163 164 165 167 168 169 171 172 174 175 177 180 181	<213 <400 Met 1 Leu Gly Glu Asp 65	2> TY 3> OF 0> SF Ala Pro Leu Glu 50 Asn	YPE: RGANI EQUEN Gln Ala Gly 35 Pro Leu	PRT ISM: NCE: Ala His 20 Gly Glu Arg	Homo 2 Leu 5 Gly Ala Glu	Pro Thr Pro Pro Lys 70	Trp Gln Leu Gly 55 Ser	Leu His Gly 40 Arg	Gly 25 Leu Arg	10 Ile Arg Gly	Arg Leu Ser Tyr 75	Leu Pro Phe 60 Tyr	Pro Arg 45 Val	Leu 30 Glu Glu	15 Arg Thr Met	Ser Asp Val Thr 80	
163 164 165 167 168 169 171 172 174 175 177 180 181	<213 <400 Met 1 Leu Gly Glu Asp 65	2> TY 3> OF 0> SF Ala Pro Leu Glu 50	YPE: RGANI EQUEN Gln Ala Gly 35 Pro Leu	PRT ISM: NCE: Ala His 20 Gly Glu Arg	Homo 2 Leu 5 Gly Ala Glu	Pro Thr Pro Pro Lys 70	Trp Gln Leu Gly 55 Ser	Leu His Gly 40 Arg	Gly 25 Leu Arg	10 Ile Arg Gly	Arg Leu Ser Tyr 75	Leu Pro Phe 60 Tyr	Pro Arg 45 Val	Leu 30 Glu Glu	15 Arg Thr Met	Ser Asp Val Thr 80	
163 164 165 167 168 169 171 172 174 175 177 178 180 181 183 184 186	<213 <400 Met 1 Leu Gly Glu Asp 65 Val	2> TY 3> OF 0> SF Ala Pro Leu 50 Asn Gly	YPE: RGANI RGANI REQUEN Gln Ala Gly 35 Pro Leu Ser Phe	PRT ISM: NCE: Ala His 20 Gly Glu Arg Pro Ala 100	Homo 2 Leu 5 Gly Ala Glu Gly Pro 85 Val	Pro Thr Pro Pro Lys 70 Gln Gly	Trp Gln Leu Gly 55 Ser Thr	Leu His Gly 40 Arg Gly Leu Ala	Gly 25 Leu Arg Gln Asn Pro 105	10 Ile Arg Gly Gly Ile 90 His	Arg Leu Ser Tyr 75 Leu Pro	Leu Pro Phe 60 Tyr Val Phe	Pro Arg 45 Val Val Asp Leu	Leu 30 Glu Glu Glu Thr	15 Arg Thr Met Met Gly 95 Arg	Ser Asp Val Thr 80 Ser Tyr	
163 164 165 167 168 169 171 172 174 175 177 180 181 183 184 186 187 189	<212 <400 Met 1 Leu Gly Glu Asp 65 Val Ser	2> TY 3> OF 3> OF 3> OF CONTROL Pro Leu Glu 50 Asn Gly Asn Gln	YPE: RGANI RGANI EQUEN Gln Ala Gly 35 Pro Leu Ser Phe Arg 115	PRT ISM: NCE: Ala His 20 Gly Glu Arg Pro Ala 100 Gln	Homo 2 Leu 5 Gly Ala Glu Gly Pro 85 Val	Pro Thr Pro Pro Lys 70 Gln Gly Ser	Trp Gln Leu Gly 55 Ser Thr Ala Ser	Leu His Gly 40 Arg Gly Leu Ala Thr	Gly 25 Leu Arg Gln Asn Pro 105 Tyr	10 Ile Arg Gly Gly Ile 90 His	Arg Leu Ser Tyr 75 Leu Pro	Leu Pro Phe 60 Tyr Val Phe Leu	Pro Arg 45 Val Val Asp Leu Arg 125	Leu 30 Glu Glu Glu Thr His 110 Lys	15 Arg Thr Met Met Gly 95 Arg	Ser Asp Val Thr 80 Ser Tyr Val	
163 164 165 167 168 169 171 172 174 175 177 180 181 183 184 186 187 189 190 192	<212 <400 Met 1 Leu Gly Glu Asp 65 Val Ser Tyr	2> TY 3> OF 0> SF Ala Pro Leu 50 Asn Gly	YPE: RGANI RGANI EQUEN Gln Ala Gly 35 Pro Leu Ser Phe Arg 115 Pro	PRT ISM: NCE: Ala His 20 Gly Glu Arg Pro Ala 100 Gln Tyr	Homo 2 Leu 5 Gly Ala Glu Gly Pro 85 Val Leu	Pro Thr Pro Pro Lys 70 Gln Gly Ser Gln	Trp Gln Leu Gly 55 Ser Thr Ala Ser Gly 135	Leu His Gly 40 Arg Gly Leu Ala Thr 120 Lys	Gly 25 Leu Arg Gln Asn Pro 105 Tyr	10 Ile Arg Gly Gly Ile 90 His Arg	Arg Leu Ser Tyr 75 Leu Pro Asp	Leu Pro Phe 60 Tyr Val Phe Leu Glu 140	Pro Arg 45 Val Val Asp Leu Arg 125 Leu	Leu 30 Glu Glu Glu Thr His 110 Lys	15 Arg Thr Met Met Gly 95 Arg Gly Thr	Ser Asp Val Thr 80 Ser Tyr Val Asp	

RAW SEQUENCE LISTING DATE: 04/10/2007 PATENT APPLICATION: US/10/567,537 TIME: 12:02:03

198 199	Ala	Ala	Ile	Thr	Glu 165	Ser	Asp	Lys		Phe 170	Ile	Asn	Gly	Ser	Asn 175	Trp
201	Glu	Gly	Ile			Leu	Ala	Tyr	Ala		Ile	Ala	Arg			Asp
202				180		_			185	-				190		_
204 205	Ser	Leu	Glu 195	Pro	Phe	Phe	Asp	Ser 200	Leu	Val	Lys	Gln	Thr 205	His	Val	Pro
207	Asn	Leu	Phe	Ser	Leu	Gln	Leu	Cys	Gly	Ala	Gly	Phe	Pro	Leu	Asn	Gln
208		210					215					220				
210	Ser	Glu	Val	Leu	Ala	Ser	Val	Gly	Gly	Ser	Met	Ile	Ile	Gly	Gly	Ile
	225					230					235					240
213	Asp	His	Ser	Leu	Tyr	Thr	Gly	Ser	Leu	\mathtt{Trp}	Tyr	Thr	Pro	Ile		Arg
214					245					250					255	
216	Glu	Trp	\mathtt{Tyr}		Glu	Val	Ile	Ile		Arg	Val	Glu	Ile		Gly	Gln
217				260				_	265					270		-
	Asp	Leu	Lys	Met	Asp	Cys	Lys		Tyr	Asn	Tyr	Asp		Ser	Ile	Val
220			275	_	_			280		_	_	_	285	_,	~7	
	Asp	Ser	Gly	Thr	Thr	Asn		Arg	Leu	Pro	Lys		Val	Phe	GIU	Ala
223		290	_	_		_	295				m1	300	T	Dl	D	7
		Val	Lys	Ser	IIe		Ala	Ala	ser	ser		GIU	гаг	Pne	Pro	
	305	5 1	m	7	a 1	310	~1 ~	T	77-7	O	315	C15	717	C111	Πh.×	320 Thr
	GIĀ	Phe	Trp	ьeu		GIU	GIII	ьeu	vai		пр	GIII	Ala	GIY	335	1111
229	D	Trp	7	T1.	325	Dwo	17a T	Tlo	Cox.	330	Тче	T OIL	Mot	Gly		17a l
231	PIO	тър	ASII	340	Pne	PIO	vai	TTE	345	ьеи	ıyı	пеп	Mec	350	Giu	var
	Thr	Asn	Gln		Dhe	Δνα	Tla	Thr		T.e.11	Pro	Gln	Gln		Len	Ara
235	1111	ASII	355	Ser	FIIC	лгg	110	360	110	ncu.	110	0411	365	-1-		••• 9
	Pro	Val		Asp	Val	Ala	Thr		Gln	Asp	Asp	Cvs		Lvs	Phe	Ala
238		370					375					380	_1 _	2		
	Ile	Ser	Gln	Ser	Ser	Thr		Thr	Val	Met	Gly	Ala	Val	Ile	Met	Glu
	385					390	٠.				395					400
		Phe	Tyr	Val	Val	Phe	Asp	Arg	Ala	Arg	Lys	Arg	Ile	Gly	Phe	Ala
244	-		-		405					410					415	
246	Val	Ser	Ala	Cys	His	Val	His	Asp	Glu	Phe	Arg	Thr	Ala	Ala	Val	Glu
247				420					425					430		
249	Gly	Pro	Phe	Val	Thr	Leu	Asp	Met	Glu	Asp	Cys	Gly	Tyr	Asn	Ile	Pro
250			435					440					445			_
252	Gln	Thr	Asp	Glu	Ser	Thr		Met	Thr	Ile	Ala		Val	Met	Ala	Ala
253		450					455					460		_		_
		Cys	Ala	Leu									Val	Cys		
	465		_	_		470			a1 .				Dl	77-		480
	Arg	Cys	Leu	Arg		Leu	Arg	GIn	GIn		Asp	Asp	Pne	Ala		Asp
259		_	_	-	485					490					495	
	шe	Ser	ьeu		ьys											
262	.01	0. 0	BO T	500												
		0> S: 1> L:														
		1> L. 2> T			-											
		2 > 1 3 > 0			Home	0 88	oien	s								
		0> S				ی عمر	L - C-11	~								
211	~=0	J - U.	-201		_											

RAW SEQUENCE LISTING DATE: 04/10/2007 PATENT APPLICATION: US/10/567,537 TIME: 12:02:03

	gctttgtgga gatggtgga	19
	<210> SEQ ID NO: 4	
	<211> LENGTH: 19	
277	<212> TYPE: DNA	
278	<213> ORGANISM: Mus musculus	
280	<400> SEQUENCE: 4	
281	gctttgtgga gatggtgga	19
284	<210> SEQ ID NO: 5	
285	<211> LENGTH: 19	
286	<212> TYPE: DNA	
287	<213> ORGANISM: Rattus sp.	
289	<400> SEQUENCE: 5	
290	gctttgtgga gatggtgga	19
	<210> SEQ ID NO: 6	
	<211> LENGTH: 19	
295	<212> TYPE: DNA	
296	<213> ORGANISM: Mus musculus	
298	<400> SEQUENCE: 6	
299	acttettgge tatggtgga	19
	<210> SEQ ID NO: 7	
303	<211> LENGTH: 19	
304	<212> TYPE: DNA	
305	<213> ORGANISM: Homo sapiens	
	<400> SEQUENCE: 7	
	acttcttggc catggtaga	19
	<210> SEQ ID NO: 8	
312	<211> LENGTH: 19	
313	<212> TYPE: DNA	
314	<213> ORGANISM: Homo sapiens	
	<400> SEQUENCE: 8	
	gacgeteaac atcetggtg	19
	<210> SEQ ID NO: 9	
	<211> LENGTH: 19	
322	<212> TYPE: DNA	
	<213> ORGANISM: Mus musculus	
325	<400> SEQUENCE: 9	
	gacgctcaac atcctggtg .	19
	<210> SEQ ID NO: 10	
	<211> LENGTH: 19	
331	<212> TYPE: DNA	
	<213> ORGANISM: Rattus sp.	
	<400> SEQUENCE: 10	
	gacgeteaac atcetggtg	19
	<210> SEQ ID NO: 11	-
	<211> LENGTH: 19	
	<212> TYPE: DNA	
	<213> ORGANISM: Mus musculus	
	<400> SEQUENCE: 11	
	gaaggtacag attcttgtg	19
	3 33 33-3	-

VERIFICATION SUMMARY

DATE: 04/10/2007 TIME: 12:02:04

PATENT APPLICATION: US/10/567,537

Input Set : A:\HMV-9001 seq listingt.txt
Output Set: N:\CRF4\04102007\J567537.raw

L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date